```
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=> FIL BIOSIS, CAPLUS, MEDLINE, WPIDS, EMBASE, SCISEARCH
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'BIOSIS' ENTERED AT 19:18:53 ON 07 DEC 2003
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FILE 'SCISEARCH' ENTERED AT 19:18:53 ON 07 DEC 2003
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=> e wise
E1            1     WISDOWN/BI
E2            1     WISDS/BI
E3        41161 --> WISE/BI
E4           10     WISE2/BI
E5            1     WISEACTIVE/BI
E6            1     WISEALL/BI
E7            1     WISEAN/BI
E8          213     WISEANA/BI
E9            1     WISEANNA/BI
E10           1     WISEBADENER/BI
E11           2     WISEBAND/BI
E12           1     WISEBERG/BI

=> s e3 and donald
L1           15 WISE/BI AND DONALD

=> s l1 and vaccine
L2            0 L1 AND VACCINE

=> s l1 and immunity
L3            0 L1 AND IMMUNITY

=> s l1 and medford
L4            0 L1 AND MEDFORD

=> s l1 and trantolo
L5           10 L1 AND TRANTOLO

=> d l5 ibib abs 1-10

L5   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2003:820838  CAPLUS
TITLE:                    Tissue Engineering and Biodegradable Equivalents:
                          Scientific and Clinical Applications By Kai-Uwe
                          Lewandrowski, Donald L. Wise,
```

Debra J. **Trantolo**, Joseph D. Gresser, Michael J. Yaszemski, David E. Altobelli (Eds.), Marcel Dekker, New York, 2002, 811 pp.
AUTHOR(S): Timmer, Mark D.; Mikos, Antonios G.
CORPORATE SOURCE: Department of Bioengineering, Rice University, Houston, TX, 77005, USA
SOURCE: Journal of Controlled Release (2003), 92(3), 399-400
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Unavailable

L5 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:829962 CAPLUS
TITLE: Bioremediation of Contaminated Soils Edited by **Donald** L. **Wise**, Debra J. **Trantolo**, Edward J. Cichon, Hilary I. Inyang, Ulrich Stottmeister
AUTHOR(S): Anon.
SOURCE: International Journal of Environment and Pollution (2001), 15(5), 578-579
CODEN: IJVLEN; ISSN: 0957-4352
PUBLISHER: Inderscience Enterprises Ltd.
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:690484 CAPLUS
TITLE: Bioremediation of contaminated soils edited by **Donald** L. **wise** and Debra J. **Trantolo**
AUTHOR(S): Beck, Curt B.
CORPORATE SOURCE: Curt Beck Engineering, Pampa, TX, USA
SOURCE: Chemical Engineering Progress (2001), 97(9), 79
CODEN: CEPRA8; ISSN: 0360-7275
PUBLISHER: American Institute of Chemical Engineers
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:123702 CAPLUS
TITLE: Book reviews: Reaction Engineering for Pollution Precention. edited by M.A. Abraham and R.P. Hesketh and Bioremediation of Contaminated Soils. edited by **Donald** L. **Wise**, Debra J. **Trantolo**, Edward J. Cichon, Hilary I. Inyang and Ulrich Stottmeister
AUTHOR(S): Bennett, Gary F.
SOURCE: Journal of Hazardous Materials (2001), 82(1), 91-92
CODEN: JHMAD9; ISSN: 0304-3894
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:45281 CAPLUS
TITLE: Elements of environmental engineering: Thermodynamics and kinetics (edited by:) Kalliat T. Valsaraj;

Remediation engineering of contaminated soils (edited by:) **Donald** L. **Wise**, Debra J. **Trantolo**, Edward J. Cichon, Hilary I. Inyang, Ulrich Stottmeister; Biofilms: Investigative methods & applications (edited by:) Hand-Curt Flemming, Ulrich Szewzyk, Thomas Griebe
AUTHOR(S): Anon.
SOURCE: Journal of Hazardous Materials (2001), 81(1-2), 205-208
CODEN: JHMAD9; ISSN: 0304-3894
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:176684 CAPLUS
TITLE: Electrical and Optical Polymer Systems edited by **Donald** L **Wise**, Gary E Wnek, Debra J **Trantolo**, Thomas M Cooper and Joseph D Grosser
AUTHOR(S): Schue, F.
SOURCE: Polymer International (2000), 49(3), 316
CODEN: PLYIEI; ISSN: 0959-8103
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:55516 CAPLUS
TITLE: Process engineering for pollution control and waste minimization by **Donald** L. **Wise** and Debra J. **Trantolo**
AUTHOR(S): Sharratt, P. N.
CORPORATE SOURCE: Environmental Technology Centre, UMIST, Manchester, UK
SOURCE: Process Safety and Environmental Protection (1995), 73(B4), 306-7
CODEN: PSEPEM; ISSN: 0957-5820
PUBLISHER: Institution of Chemical Engineers
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:957233 CAPLUS
TITLE: Remediation of Hazardous Waste Contaminated Soils by **Donald** L. **Wise** and Debra J. **Trantolo** (Eds)
AUTHOR(S): Anderson, W. A.
CORPORATE SOURCE: Dep. Chem. Eng., Univ. Waterloo, Can.
SOURCE: Process Safety and Environmental Protection (1995), 73(B3), 252-3
CODEN: PSEPEM; ISSN: 0957-5820
PUBLISHER: Institution of Chemical Engineers
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:757900 CAPLUS
TITLE: Remediation of Hazardous Waste Contaminated Soils, by **Donald** L. **Wise** and Debra J.

Trantolo (Editors)
AUTHOR(S): Bouwer, E. J.
CORPORATE SOURCE: Baltimore, MD, USA
SOURCE: Journal of Contaminant Hydrology (1995), 19(4), 321-3
CODEN: JCOHE6; ISSN: 0169-7722
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal; Book Review
LANGUAGE: English
AB Unavailable

L5 ANSWER 10 OF 10 MEDLINE on STN
ACCESSION NUMBER: 2003491427 IN-PROCESS
DOCUMENT NUMBER: 22930446 PubMed ID: 14568422
TITLE: Tissue Engineering and Biodegradable Equivalents: Scientific and Clinical Applications. By Kai-Uwe Lewandrowski, **Donald** L. **Wise**, Debra J. **Trantolo**, Joseph D. Gresser, Michael J. Yaszemski, David E. Altobelli (Eds.), Marcel Dekker, New York, 2002, 811 pp.
AUTHOR: Timmer Mark D; Mikos Antonios G
CORPORATE SOURCE: Department of Bioengineering, Rice University, 77005, Houston, TX, USA.
SOURCE: JOURNAL OF CONTROLLED RELEASE, (2003 Oct 30) 92 (3) 399-400.
Journal code: 8607908. ISSN: 0168-3659.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20031022
Last Updated on STN: 20031022

=> FIL STNGUIDE
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	27.67	27.88

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 5, 2003 (20031205/UP).

=> FIL BIOSIS, CAPLUS, MEDLINE, WPIDS, EMBASE, SCISEARCH
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.36	28.24

FILE 'BIOSIS' ENTERED AT 19:26:28 ON 07 DEC 2003
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FILE 'WPIDS' ENTERED AT 19:26:28 ON 07 DEC 2003

FILE 'EMBASE' ENTERED AT 19:26:28 ON 07 DEC 2003

FILE 'SCISEARCH' ENTERED AT 19:26:28 ON 07 DEC 2003

=> s polymer and vaccine
L6 3775 POLYMER AND VACCINE

=> s l6 lactide-co-glycolide
MISSING OPERATOR L6 LACTIDE-CO-
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l6 and lactide
L7 647 L6 AND LACTIDE

=> sl7 and glycolide
SL7 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l7 and glycolide
L8 558 L7 AND GLYCOLIDE

=> s l8 and biodegradable
L9 357 L8 AND BIODEGRADABLE

=> s l9 and particulate
L10 17 L9 AND PARTICULATE

=> s l10 and pylori
L11 0 L10 AND PYLORI

=> s l10 and anthrax
L12 0 L10 AND ANTHRAX

=> s l10 and malaria
L13 0 L10 AND MALARIA

=> dup rem l10
PROCESSING COMPLETED FOR L10
L14 10 DUP REM L10 (7 DUPLICATES REMOVED)

=> d l14 ibib abs 1-14

L14 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:656529 CAPLUS
DOCUMENT NUMBER: 139:202454
TITLE: Stabilized synthetic immunogen delivery system
INVENTOR(S): Sokoll, Kenneth K.
PATENT ASSIGNEE(S): United Biomedical Inc., USA
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068169	A2	20030821	WO 2003-US4711	20030214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003165478	A1	20030904	US 2002-76674	20020214

PRIORITY APPLN. INFO.: US 2002-76674 A 20020214

AB The present invention provides an immunostimulatory complex specifically adapted to act as adjuvant and as a peptide immunogen stabilizer. The immunostimulatory complex comprises a CpG oligonucleotide and a biol. active peptide immunogen. The immunostimulatory complex is **particulate** and can efficiently present peptide immunogens to the cells of the immune system to produce an immune response. The immunostimulatory complex may be formulated as a suspension for parenteral administration. The immunostimulatory complex may also be formulated in the form of w/o-emulsions, as a suspension in combination with a mineral salt suspension or with an in-situ gelling **polymer** for the efficient delivery of an immunogen to the cells of the immune system of a subject following parenteral administration, to produce an immune response which may also be a protective immune response.

L14 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:749990 CAPLUS

DOCUMENT NUMBER: 139:265759

TITLE: **Biodegradable** targetable microparticle delivery systems

INVENTOR(S): Sokoll, Kenneth K.; Chong, Pele; Klein, Michel H.

PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: U.S., 63 pp., Cont.-in-part of U. S. Ser. No. 770,850. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6623764	B1	20030923	US 1999-331118	19990831
US 6042820	A	20000328	US 1996-770850	19961220
WO 9828357	A1	19980702	WO 1997-CA980	19971219
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
JP 2002138139	A2	20020514	JP 2001-255329	19971219
JP 3428972	B2	20030722		
JP 2003261661	A2	20030919	JP 2003-65795	19971219

PRIORITY APPLN. INFO.: US 1996-770850 A2 19961220
WO 1997-CA980 W 19971219

JP 1998-528169 A3 19971219
JP 2001-255329 A3 19971219

AB Copolymers designed for use as **particulate** carriers contg. functionalizable amino acid subunits for coupling with targeting ligands are described. The copolymers are polyesters composed of .alpha.-hydroxy acid subunits such as DL-**lactide** and pseudo-.alpha.-amino acid subunits which may be derived from serine or terpolymers of DL-**lactide** and **glycolide** and pseudo-.alpha.-amino acid subunits which may be derived from serine. Stable **vaccine** prepns. useful as delayed release formulations contg. antigen or antigens and adjuvants encapsulated within or phys. mixed with polymeric microparticles are described. The **particulate** carriers are useful for delivering agents to the immune system of a subject by mucosal or parenteral routes to produce immune responses, including antibody and protective responses. Thus, DL-**lactide**-**glycolide** -serine lactone (47.5:47.5:5.0) was polymd. in the presence of stannous 2-ethylhexanoate in anhyd. chloroform. This **polymer** was mixed with CH2Cl2 and Hin-47 analog and the mixt. was dispersed into a 1.0% aq. soln. of poly(vinyl alc.) and immediately homogenized to form a water-in-oil-in-water double emulsion. Polydisperse microparticles (with the majority <10 .mu. in size) were formed under these conditions.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 10 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
ACCESSION NUMBER: 2003:412126 SCISEARCH
THE GENUINE ARTICLE: 676LL
TITLE: Encapsulation of plasmid DNA in PLGA-stearylamine microspheres: a comparison of solvent evaporation and spray-drying methods
AUTHOR: Atuah K N; Walter E; Merkle H P; Alpar H O (Reprint)
CORPORATE SOURCE: Univ London, Sch Pharm, 29-39 Brunswick Sq, London WC1N 1AX, England (Reprint); Univ London, Sch Pharm, London WC1N 1AX, England; Swiss Fed Inst Technol, Inst Appl Biosci, Zurich, Switzerland
COUNTRY OF AUTHOR: England; Switzerland
SOURCE: JOURNAL OF MICROENCAPSULATION, (MAY-JUN 2003) Vol. 20, No. 3, pp. 387-399.
Publisher: TAYLOR & FRANCIS LTD, 4 PARK SQUARE, MILTON PARK, ABINGDON OX14 4RN, OXON, ENGLAND.
ISSN: 0265-2048.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 17

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Stearylamine, a positively charged hydrophobic molecule, was tested as a formulation agent for the encapsulation of a model plasmid in PLGA microspheres. The primary objective was to compare the spray-drying and double emulsion solvent evaporation methods and evaluate their suitability for fabricating PLGA-stearylamine plasmid-entrapped microspheres. A luciferase reporter gene plasmid (pGL3-Con) was formulated into microspheres using a 64 kDa PLGA 50:50 **polymer** blended with stearylamine (SA) at a range of concentrations up to 15%(m)/(m), by the solvent evaporation and spray-drying methods. The microspheres were characterized regarding their size distributions, zeta potentials and morphology by laser diffraction, electrophoretic mobility and scanning electron microscopy (SEM), respectively. Formulated plasmid extracts were assessed for physical damage by agarose gel electrophoresis, and the in vitro biological activity was determined by tranfection of a human embryo kidney epithelial (293) cell line. Size distribution analysis showed that SA reduced the median diameters of spray-dried particles from 8.32 to 3.64 microns, with a corresponding reduction in the spread of the distribution,

but solvent evaporation microspheres showed an increased median diameter on addition of SA. Concentrations of SA above 10%(m)/(m) resulted in disruption of the smooth morphology of the solvent evaporation particles. There was a SA concentration-dependent tendency in the increase of surface positive charge and resistance to serum nuclease assault and in vitro expression of luciferase protein. These results show that SA and possibly other charged hydrophobic molecules may be useful agents in the formulation of **particulate** DNA **vaccines** by both methods.

L14 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2002:675881 CAPLUS
DOCUMENT NUMBER: 137:222038
TITLE: Carrier systems comprising vitamin B12-**biodegradable** microparticulate conjugates for peroral delivery of drugs, peptides/proteins and **vaccines**
INVENTOR(S): Chalasani, Kishore Babu; Diwan, Prakash Vamanrao; Raghavan, Kondapuram Vijaya; Russell-Jones, Gregory John; Jain, Sanjain Kumar; Rao, Kollipara Koteshawa
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002067995	A1	20020906	WO 2001-IN27	20010226
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2374010	A1	20021009	GB 2002-7457	20010226
EP 1363672	A1	20031126	EP 2001-915652	20010226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 6482413	B1	20021119	US 2001-795979	20010301
US 2002192235	A1	20021219		

PRIORITY APPLN. INFO.: WO 2001-IN27 A 20010226

AB The invention relates to a novel complex for oral delivery of drugs, therapeutic protein / peptides and **vaccines** which are loaded in a vitamin B12 (VB12) coupled **particulate** carrier system with spacers in between, the carrier system with spacers having a formula VB12-R1/R2-N wherein, R1 or R2 is spacer and/or agents for derivatization of VB12 to provide either NH2 or COOH or SH groups, and N is the micro- or nano-particle carriers for the delivery of injectable drugs, therapeutic protein/peptides and **vaccines**. A no. of VB12 derivs. were prepd. and conjugated to modified polysaccharide derivs. such as starch, chitosan, dextran, or guar gum.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:466547 CAPLUS

DOCUMENT NUMBER: 137:37682
TITLE: Bioactive agent delivering system comprised of microparticles within a **biodegradable** to improve release profiles
INVENTOR(S): Shih, Chung; Zenter, Gaylen
PATENT ASSIGNEE(S): Macromed, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 559,507.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002076441	A1	20020620	US 2001-906041	20010713
US 6589549	B2	20030708		
US 6287588	B1	20010911	US 2000-559507	20000427
WO 2003005961	A2	20030123	WO 2002-US22017	20020712

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2000-559507 A2 20000427
US 1999-131562P P 19990429
US 2001-906041 A 20010713

AB A compn. and method for releasing a bio-active agent or a drug within a biol. environment in a controlled manner is disclosed. The compn. is a dual phase polymeric agent-delivery compn. comprising a continuous biocompatible gel phase, a discontinuous **particulate** phase comprising defined microparticles and an agent to be delivered. A microparticle contg. a bio-active agent is releasably entrained within a biocompatible polymeric gel matrix. The bioactive agent release may be contained in the microparticle phase alone or in both the microparticles and the gel matrix. The release of the agent is prolonged over a period of time, and the delivery may be modulated and/or controlled. In addn., a second agent may be loaded in some of the microparticles and/or the gel matrix. A microparticle reverse thermal gelation agent delivery system contained Zn-hGH incorporated into **glycolide-lactide** copolymer microspheres.

L14 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:790276 CAPLUS
DOCUMENT NUMBER: 133:340262
TITLE: Drug delivery system based on **biodegradable** polyester microparticles
INVENTOR(S): Shih, Chung; Zentner, Gaylen M.
PATENT ASSIGNEE(S): Macromed, Inc., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066085	A1	20001109	WO 2000-US11387	20000428
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6287588	B1	20010911	US 2000-559507	20000427
PRIORITY APPLN. INFO.:			US 1999-131562P P	19990429
			US 2000-559507 A	20000427

AB A compn. and method for releasing a bioactive agent or a drug within a biol. environment in a controlled manner is disclosed. The compn. is a dual phase polymeric agent-delivery compn. comprising a continuous biocompatible gel phase, a discontinuous **particulate** phase comprising defined microparticles and an agent to be delivered. A microparticle contg. a bio-active agent is entrained within a biocompatible polymeric gel matrix. The bio-active agent release may be contained in the microparticle phase alone or in both the microparticles and the gel matrix. The release of the agent is prolonged over a period of time, and the delivery may be modulated and/or controlled. In addn., a second agent may be loaded in some of the microparticles and/or the gel matrix. Zn-human growth hormone was incorporated into poly(DL-**lactide**-co-**glycolide**) microspheres. The microspheres were added to reverse thermal gelation soln. (RTG) (20% in 10 mM HEPES buffer, pH 7.0) to suspend the particles. The RTG-microparticle system of the present invention effectively reduced the initial burst effect of the microparticle delivery system.2 0 EXAMPLE.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:479572 CAPLUS
DOCUMENT NUMBER: 129:100060
TITLE: **Biodegradable** targetable microparticle delivery system
INVENTOR(S): Sokoll, Kenneth K.; Chong, Pele; Klein, Michel H.
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9828357	A1	19980702	WO 1997-CA980	19971219
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6042820	A	20000328	US 1996-770850	19961220

AU 9854721	A1	19980717	AU 1998-54721	19971219
AU 729305	B2	20010201		
EP 946624	A1	19991006	EP 1997-951024	19971219
EP 946624	B1	20030402		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000509428	T2	20000725	JP 1998-528169	19971219
JP 3242118	B2	20011225		
BR 9714065	A	20001024	BR 1997-14065	19971219
NZ 336718	A	20010126	NZ 1997-336718	19971219
JP 2002138139	A2	20020514	JP 2001-255329	19971219
JP 3428972	B2	20030722		
AT 236207	E	20030415	AT 1997-951024	19971219
JP 2003261661	A2	20030919	JP 2003-65795	19971219
US 6623764	B1	20030923	US 1999-331118	19990831
US 6228423	B1	20010508	US 2000-501373	20000211
US 6287604	B1	20010911	US 2000-502674	20000211
US 6312732	B1	20011106	US 2000-499533	20000211
US 6471996	B1	20021029	US 2000-499532	20000211

PRIORITY APPLN. INFO.: US 1996-770850 A2 19961220
JP 1998-528169 A3 19971219
JP 2001-255329 A3 19971219
WO 1997-CA980 W 19971219

AB Copolymers designed for use as **particulate** carriers contg. functionalizable amino acid subunits for coupling with targeting ligands are described. The copolymers are polyesters composed of .alpha.-hydroxy acid subunits such as D,L-**lactide** and pseudo-.alpha.-amino acid subunits which may be derived from serine or terpolymers of D,L-**lactide** and **glycolide** and pseudo-.alpha.-amino acid subunits which may be derived from serine. Stable **vaccine** prepns. useful as delayed release formulations contg. antigen or antigens and adjuvants encapsulated within or phys. mixed with polymeric microparticles are described. The **particulate** carriers are useful for delivering agents to the immune system of a subject by mucosal or parenteral routes to produce immune responses, including antibody and protective responses. A **glycolide-lactide** -pseudo-Z-serine ester and its deprotected analog were prepd. and microparticles were prepd. from these copolymers. The copolymer microparticles were used to encapsulate immune adjuvants or proteins.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2

ACCESSION NUMBER: 1998:166351 BIOSIS
DOCUMENT NUMBER: PREV199800166351
TITLE: Recent advances in **vaccine** adjuvants for systemic and mucosal administration.
AUTHOR(S): O'Hagan, Derek T. [Reprint author]
CORPORATE SOURCE: Chiron Corp., 4560 Horton St., Emeryville, CA, USA
SOURCE: Journal of Pharmacy and Pharmacology, (Jan., 1998) Vol. 50, No. 1, pp. 1-10. print.
CODEN: JPPMAB. ISSN: 0022-3573.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Apr 1998
Last Updated on STN: 6 Apr 1998

RS, J.6C

AB Although **vaccines** produced by recombinant DNA technology are safer than traditional **vaccines**, which are based on attenuated or inactivated bacteria or viruses, they are often poorly immunogenic. Therefore, adjuvants are often required to enhance the immunogenicity of

these **vaccines**. A number of adjuvants which are **particulates** of defined dimensions (< 5 mum) have been shown to be effective in enhancing the immunogenicity of weak antigens in animal models. Two novel adjuvants which possess significant potential for the development of new **vaccines** include an oil-in-water microemulsion (MF59) and polymeric microparticles. MF59 has been shown to be a potent and safe adjuvant in human subjects with several **vaccines** (for example HSV-2, HIV-1 and influenza virus). An MF59 adjuvanted influenza has been recommended for approval in Italy. Microparticles prepared from the **biodegradable polymers** the poly(**lactide**-co-**glycolides**) (PLG) are currently undergoing extensive pre-clinical evaluation as **vaccine** adjuvants. Because of their controlled release characteristics, microparticles also possess considerable potential for the development of single dose **vaccines**. The development of single dose **vaccines** would offer significant advantages and would improve vaccination uptake rates in at risk populations, particularly in the developing world. In addition to systemic administration, microparticles have also also been shown to enhance the immunogenicity of **vaccines** when administered by mucosal routes. Therefore microparticles may allow the development of novel **vaccines** which can be administered by non-parenteral routes. Mucosal administration of **vaccines** would significantly improve patient compliance by allowing immunization to be achieved without the use of needles. An alternative approach to the development of mucosally administered **vaccines** involves the production of genetically detoxified toxins. Heat labile enterotoxin (LT) from Escherichia coli and cholera toxin from Vibrio cholerae are two closely related bacterially produced toxins, which are the most potent adjuvants available. However, these molecules are too toxic to be used in the development of human **vaccines**. Nevertheless, these toxins have been modified by site-directed mutagenesis to produce molecules which are adjuvant active, but non-toxic. The most advanced of these molecules (LTK63), which has a single amino acid substitution in the enzymatically active subunit of LT, is active as an adjuvant, but non-toxic in pre-clinical models. The approach of genetically detoxifying bacterial toxins to produce novel adjuvants offers significant potential for the future development of mucosally administered **vaccines**.

L14 ANSWER 9 OF 10 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
ACCESSION NUMBER: 97:904891 SCISEARCH
THE GENUINE ARTICLE: YJ428
TITLE: The immune response to a model antigen associated with PLG microparticles prepared using different surfactants
AUTHOR: Rafati H; Lavelle E C; Coombes A G A; Stolnik S; Holland J (Reprint); Davis S S
CORPORATE SOURCE: DARO PAKHSH PHARMACEUT PLC, POB 11365, TEHRAN, IRAN (Reprint); DARO PAKHSH PHARMACEUT PLC, TEHRAN, IRAN; UNIV NOTTINGHAM, DEPT PHARMACEUT SCI, NOTTINGHAM NG7 2RD, ENGLAND
COUNTRY OF AUTHOR: IRAN; ENGLAND
SOURCE: VACCINE, (DEC 1997) Vol. 15, No. 17-18, pp. 1888-1897. Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD, OXON, ENGLAND OX5 1GB. ISSN: 0264-410X.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; AGRI
LANGUAGE: English
REFERENCE COUNT: 36

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The effect of different surfactants on the surface characteristics of poly(D,L-**lactide**-co-**glycolide**) microparticles prepared

by the emulsification/solvent evaporation technique was investigated and the immune response to a protein antigen (OVA) associated with these microparticles was measured Three surfactants - polyvinyl alcohol (PVA, a conventional stabiliser of PLG microparticles), the non-ionic surfactant, poly(oxyethylene glycerol mono-oleate) [Tagat] and Bile salts (a natural emulsifier) - were used to produce OVA-loaded PLG microparticles. Antigen was detected at the surface of all three types of OVA-loaded microparticles, in amounts in excess of 40% of the total protein lend. The levels of specific serum Ige antibody elicited to OVA were significantly higher ($P<0.05$) after a single subcutaneous administration of antigen associated with the Bile salts and Tagat formulations compared to the PVA formulation. A strong correlation was revealed between tile levels of antibody measured and the magnitude of negative surface charge of the **particulate** carrier. The pattern of the IgG antibody response to OVA was similar in all three cases, indicating that the degradation rate of the PLC **polymer** determined the duration of the response. The results demonstrate the potential of using different surfactants to produce PLG microparticles with increased adjuvant activity. (C) 1997 Elsevier Science Ltd.

L14 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1997:179911 CAPLUS
DOCUMENT NUMBER: 126:229461
TITLE: Recent advances in **vaccine** adjuvants: the development of MF59 emulsion and polymeric microparticles
AUTHOR(S): O'Hagan, Derek T.; Ott, Gary S.; Van Nest, Gary
CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, 94704, USA
SOURCE: Molecular Medicine Today (1997), 3(2), 69-75
CODEN: MMTOFK; ISSN: 1357-4310
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 47 refs. **Vaccines** produced by recombinant DNA technol. are safer than 'traditional' **vaccines** but they are often poorly immunogenic, requiring adjuvants to enhance their immunogenicity. **Particulate** adjuvants of defined dimensions (<5 .mu.m) have been shown to be effective in enhancing the immunogenicity of 'weak' antigens in animal models. Two novel adjuvants that have significant potential for the development of new **vaccines** are the MF59 sub-microemulsion and polymeric microparticles. MF59 is an oil-in-water emulsion and has been shown to be both potent and safe in human subjects with several **vaccines**. Microparticles prepd. from the **biodegradable polymer** poly(**lactide** -co-**glycolide**) have been shown to enhance immunogenicity when administered by mucosal routes, such as oral and intranasal, and they also possess considerable potential for the development of single-dose **vaccines** through the use of controlled-release technol.

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	52.01	80.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.56	-4.56

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 5, 2003 (20031205/UP).

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